Steven D. Beare
7 E. Brookland Ave.
Wilmington, DE 19805

Dear Eric,
Hope you can help.
Regards, Steve

Subj: Draft of New York Scalemakers
Date: 98-08-11 21:32:59 EDT
From: Stevebooks
To: betty_barth@time-inc.com, Scaleskeys
To: iweighu@chicago.avenew.com, jhberning@yahoo.com
To: BucBlu, jcattle@navix.net, NECIMA
To: Thomas_Dooley@bbs.macnexus.org
To: joeghilarducci@msn.com, Nahan, cre8conn@adnc.com
To: bobhay@texas.net, CONGREVE, LeHitchins
To: reme@mpls.k12.mn.us, Jeromekatz, mrl@stat.unc.edu
To: mrl@email.unc.edu, glev@erols.com, Markr
To: redrobin5226@juno.com, MAMurph721
To: shirley.schmidt@trw.com, Rovers, SHAWVIM, Issil
To: bfsmith@dmci.net, JudyLoon, hls@clark.net
To: NormSBDO, mediamom@cris.com
To: tomvannatta@sprintmail.com, rwillard@sirius.com
To: yaledale@together.net, jackyoung@access1.net
CC: Stevebooks

Dear fellow ISASC members:

Attached is a working copy of a listing of 19th century NY scalemakers. It is far from complete, and I need your help to generate additional names.

Please look over the listing and send me any additional names, preferably 19th century scalemakers working in the 1830-1890 period. This will likely be extended both directions, but I have had to limit it initially or I would never finish. This is ultimately to be published in EQM for all of us to use, so I would like to be as complete and accurate as possible. I have gleaned most of the information form New York City and Business Directories in the collections of the NY Historical Society (bound volumes for most of the years), and the NY Public Library (microfilms for all years).

Your upgrades and comments are most appreciated. If you can supply a name, that is fine, and it will be most helpful if you can supply approximate working dates to help narrow down the search.

Ideally, one would go through each name in every directory, and last Saturday I tried an experiment with the 1834 NY directory, which has only 38,000 names. In one hour, I was able to cover one fourth of the directory, and located five scalemakers, four of whom were new to me, and two of whom (Charles Bartlett and John Bather) did not appear in earlier or later years. However, the directories expand considerably in the 70's and 80's, and I'm hoping someone will scan these into a computer so one can in seconds do what it would now take hundreds of hours.

Meanwhile, your help will help quickly bring this project to a close.

I have followed the format of Gloria Clifton. *Directory of British Scientific Makers,* who I suspect followed the format created by Michael and Diana Crawforth.

If this is fruitful, I will also send you a draft of Philadelphia scalemakers, which I am actively working on, to be followed by Boston scalemakers.

New York City Scalemakers- 1830-1890 (Draft 10)

ALLENDER John (check)
1850s

ASTEN, SPARK, & CO.
1851 781 Washington
Also listed at 45 Greene in 1851(Doggett). manufacturer of the Excelsior Spring Balance.
See also
ASTEN T. B.
SPARK Alexander

ASTEN T.B.
See also
ASTEN, Spark, & CO.
SPARK Alexander

AYERS Isaac
Scales
1845-71 83 Fulton
Took over from BROWN J. L. & Co Mfgr. of assaying, bank, jewelers' and apothecary scales, patent balances, platform and grocers scales of all kinds, weights adjusted to any standard and warrented correct.
Also agent for N. Y. Journeymen Scalemakers Co.
See also
AYERS Oliver C.
BROWN & AYERS
BROWN John L.
BROWN J. L. & CO.
NEW YORK JOURNEYMEN SCALEMAKERS CO.

AYERS Oliver C.
Scales
1868-1873 83 Fulton
See also AYERS Isaac

BARTLETT Charles
Scalebeams
1834 21 Canal

BATHER John
Scalemaker
1834 55 Bowery

BECKER & Sons
Scales
1869-1871 18 Exchange Place
1875-1876 232 E. 128th
1878-1884 6 Murray
Christopher and Ernst left their father in 1884, starting their own business Becker Brothers.
See also
BECKER BROTHERS
BECKER Christian
BECKER Christopher
BECKER Ernst

BECKER BROTHERS (est 1884)
Scales
1885-1890+ 6 Murray
When Ernst died in 1892, firm name changed to Christian Becker.
See also
BECKER & Sons
BECKER Christian
BECKER Christopher
BECKER Ernst

BECKER Christian
Scales
1869-1871 18 Exchange Place
1875 232 E. 128th
1878-1890+ 6 Murray
See also
BECKER & Sons
BECKER BROTHERS
BECKER Christopher
BECKER Ernst

BECKER Christopher (see 1851-1861)
Scales
1869-1871 18 Exchange Place
1872-1876 232 E. 128th
1878-1884 6 Murray
When Christopher died in 1888, his business terminated.
See also
BECKER & Sons
BECKER BROTHERS
BECKER Christian
BECKER Ernst

BECKER Ernst (died 1892)
Scales
1869-1871 18 Exchange Place
1875-1876 232 E. 128th
1878-1888 6 Murray
See also
BECKER & Sons
BECKER BROTHERS
BECKER Christian
BECKER Christopher

BERRIAN Ernest (check)
1870s

BLATTNER Jacob
Scale manufacturer
1855-1857 929 Third Ave.
1858-1866 690 Third Ave.
1870 225 E. 35th
1871-1883 225 E. 42nd

BREMNER Andrew A.
Balances
1844-1845 61 Elizabeth
1847-1850 63 Elizabeth
1851 15 Platt
1852-1853 212 Pearl
See also
MORTON & BREMNER
MORTON Thomas

BROWN & AYERS
Scales
1845 83 Fulton
See also
AYERS Isaac
BROWN John L.
BROWN J. L. & CO.

BROWN John L.
1840-1860 234 Water
1844 234 & 252 Water
1861 16 Beckman
See also
AYERS Isaac
BROWN & AYERS
BROWN J. L. & CO.
BROWN John L.

BROWN J. L. & CO.
1846 83 Fulton
Succeeded by AYERS Isaac

BROWN & FEARNHEAD
1844 83 Fulton

BRYDEN John
Scalemaker
1849-1850 43 Greene
1851-1854 39 Greene

1855 221 Pearl & 39 Greene
1857 221 Pearl & 41 Wooster
1858-1864 173 Pearl & 73 Laurens
1865-1868 155 Water & 73 Laurens
1870-1871 195 Water & 73 Laurens
1872-1873 195 Water & 211 Greene
1875 195 Water
See also
BRYDEN & ROBIDOUX
NEW YORK JOURNEYMEN SCALEMAKERS CO.
ROBIDOUX

BRYDEN & ROBIDOUX
1852-1854 39 Greene
1855 222 Pearl & 39 Greene
1856-1857 221 Pearl & 41 Wooster
1858-1864 173 Pearl & 73 Laurens
1865-1868 155 Water & 73 Laurens
1869-1871 195 Water & 73 Laurens
1872-1873 195 Water & 211 Greene
1875 195 Water
See also
BRYDEN John
NEW YORK JOURNEYMEN SCALEMAKERS CO.
ROBIDOUX

BUCKUP E.
1853 64 Duane

BULL Benjamin (check 1835)
Scalebeam maker
1829-1831 81 Washington
1832 73 Washington
1834 87 Eldridge
1838 177 Forsyth
See also BULL James H.

BULL James H.
Platform scales
1838 177 Forsyth
1839-1840 174 Elm
1844 33 S. William & 35 Stone
Mfgrs. of scales and balances of every description, also Salter's Spring Balances
See also BULL Benjamin

CHARLES Robert
Teas
1848 163 Greenwich
Received diploma for tea scales at 20th Annual Fair of the American Institute, October, 1847

CHATILLON George (check)
Patent balances
1835-1836 346 Broome
1837-1842 14 Frankfort
See also
CHATILLON John

CHATILLON George H.
Scales
1872-1882 91-93 Cliff
1884-1890+ 89 Cliff
See also

CHATILLON John
Balances
1844 rear 14 Frankfort
1846 14 Frankfort
1849-1854 33 Cherry
1856-1871 93 Cliff
See also CHATILLON George

CHATILLON John P. (check)
1871-1884 91-93 Cliff
1885-1890+ 89 Cliff

CHATILLON John & Sons
Spring balances & scales
1873-1875 91 & 93 Cliff
1876-1884 89, 91 & 93 Cliff
1885 85, 87 & 89 Cliff
1886-1890+ 89 Cliff
See also
CHATILLON George
CHATILLON John

COCK William R. (Check)
1869 75 John

COLE John
Platform scales, patent scalebeam maker
1828 555 Broome
1829 83 Washington
1833-1834 73 Washington
1836 Rochester, NY
See also
COLE & SMITH
SMITH Samuel

COLE & SMITH
Platform scales
1836 77 Washington
See also
COLE John
SMITH Samuel

DALE John D.
Manufacturer of scales
1847-1848 114 Front (h. Lansingburgh)
1849-1850 W. 26th n. 10th Ave.

DAVENPORT & WORTHINGTON (CHECK)
1869 3 Barclay & 885 Third Ave.

DERBY George (check)
1850-1851 259 Water
1869 259 Water

DICKIE Edward P.
1852 144 Chambers
Listed as agency of the JOURNEYMAN SCALE CO.
advert. p. 3 1852 city directory (NYHS)

DORVAL Edward
1852 96 Maiden Lane

DUNCAN Robert
Scalemaker
1832-1834 97 Reade

DURYEE Chauncy
Scales
1851-1854 166 Pearl (h. Rochester)
See also
DURYEE & FORSYTH

FORSYTH Orrin

DURYEE & FORSYTH
Scales
1851-1854 166 Pearl
1855-1857 13 Whitehall
See also
DURYEE Chauncy
FORSYTH Orrin

ELLICOTT & ABBOTT
1850 7 Nassau

ENGELMANN & CO.
1854 93 William upstairs
Apothecary scales of different sizes at wholesale

FAIRBANKS E. & T.
1848 see CD

FAIRBANKS & CO. (check)
Scales
1849 81 Water
1850-1854 89 Water
1855-1857 189 Broadway
1859-1861 189 Broadway & 100 Maiden Lane
1869 69 Warren & 312 Pearl

FAIRBANKS Charles
Scales
1855-1861 189 Broadway

FAIRBANKS Erastus
Scales
1857-1861 189 Broadway

FAIRBANKS Franklin
Scales
1858-1861 189 Broadway

FAIRBANKS Horace
Scales
1857-1861 189 Broadway

FAIRBANKS Thaddeus
Scales
1857-1861 189 Broadway

FARR Chester N.
Platform scales
1836 Bank n. West
1839-1841 129 Amos
1843-1845 609 Water
1849-1850 43 Greene
1851 39 Greene
1852 126 Amos
1853 home address only
1854 248, 250, & 252 W. 27th
1856 352 W. 27th
See also
FARR Jonathan L.
FARR & FOWLER
FOWLER Albert
GERALDS Asahel
GERALDS & FARR

FARR Jonathan L.
1857 352 W. 27th

FARR & FOWLER
Scale & vicemakers
1841 129 Amos

FEARNHEAD William
Scalebeams
1842-1844 83 Fulton
See also

FLEISCHMAN F. & P.
Manufacturers of patent balances
1852-1854 91 Fulton
1855 89 Fulton
1869-1871 168 Ludlow
See also
FLEISCHMAN Frederick
FLEISCHMAN Louis
FLEISCHMAN Philip

FLEISCHMAN Frederick
Scalemaker
1855 h. 168 Ludlow
1857-1861 89 Fulton
1871 168 Ludlow
See also
FLEISCHMAN F. & P.
FLEISCHMAN Louis
FLEISCHMAN Philip

FLEISCHMAN Louis
Scalemaker
1871 h. 309 Stanton
See also
FLEISCHMAN F. & P.
FLEISCHMAN Frederick
FLEISCHMAN Philip

FLEISCHMAN Philip
Scales
1855 89 Fulton
1871 168 Ludlow
See also
FLEISCHMAN F. & P.
FLEISCHMAN Frederick
FLEISCHMAN Louis

FORSCHNER (check 1850S)

FORSYTH Orrin
Scales
1851-1854 166 Pearl (h. Rochester)
See also
DURYEE Chauncy
DURYEE & FORSYTH

FOWLER Albert
Platform scales
1841 129 Amos
See also
FARR Chester N.
FARR & FOWLER

GERALDS Asahel
Platform scales
1836 Bank n. West
1837 125 Bank
1838-1840 129 Amos
1841 133 Amos
1843-1850 120 Barrow
1851-1855 302 W. 13th
1856 NYPL

GERALDS Guy C.
1841 68 Greenwich Lane
1844-1850 120 Barrow
1851-1854 302 W. 13th

GERALDS & FARR
Platform scales
1836 Bank n. West
1837 125 Bank
1838-1839 129 Amos

GROOM Levi J. (check)
1869 988 Third Ave.

GRUBER John P.
Scale manufacturer

1856 51 Beekman
1858-1860 168, 170 & 184 Chatham Sq.
1861 168 Chatham
1869 2 Mott

HOWE Frank G. (check)
1869 78 Broadway

JOHNSON Edwin A.
1856 36 Broadway

JOHNSTON James
1849 67 Fulton
1854 4 Dover

JONES William
Scalebeam maker
1837-1841 83 Fulton
see also
JONES & MCDONALD
MCDONALD Ronald A.

JONES & MCDONALD
Scalebeams
1837-1840 83 Fulton
See also
JONES William
MCDONALD Ronald A.

JOURNEYMEN SCALEMAKERS CO.
See NEW YORK JOURNEYMEN SCALEMAKERS CO.

KISSAM James A.
1849-1850 67 Fulton
1851-1854 95 Fulton
1856 Fulton corner Gold
1857 81 Fulton
See also
KISSAM & UNDERWOOD
UNDERWOOD

KISSAM & UNDERWOOD (check)
1869 221 Greenwich
See also
KISSAM James A.
KISSAM & UNDERWOOD

KOHLBUSH H. (check)

LABARTE Nathanial P.
1846 44 Eldridge
1849 44 & 46 Eldridge
1850,1852 46 Eldridge
1851 44 & 46 Eldridge
1853 46 Eldridge
1854 44 Eldridge
1856 Canal corner Bowery & 46 Eldridge

LAMPORT Hiram H.
1844 279 Pearl

LEWIS John
Scalebeams
1848-1851 91 Fulton

LEWIS & FLEISCHMAN
1856 89 Fulton
1857 168 Ludlow & 89 Fulton

LORING Daniel
Scalebeam maker
1830-1831 198 Broome
1832-1834 44 Eldridge
1835-1836 198 Broome

MCDONALD Ronald A.
Scalebeams
1837-1841 83 Fulton
see also
JONES William
JONES & MCDONALD

MCDOUGALL S. T.
1846-1849 103 Wall

MCDOUGALL Samuel T.
1854 166 Pearl

MCDOUGALL & CO.
1844 81 Wall & 114 Front

MCDOUGALL & FROST
1850 88 Water

MCHUGH John
1852-1853 12 Vandewater

MANIX James
1852 16 Cottage Place

MARKWELL Samuel
1844 91 1/2 & 105 Fulton
1846 91 Fulton

MORTON Thomas
Scales
1852-1855 212 Pearl
1856 393 First Ave.
1857-1863 212 Pearl & 63 Elizabeth
1864-1868 96 Maiden Lane & 63 Elizabeth
1869-1870 6 Park Place
1871-1875 15 Murray
See also
BREMNER Andrew A.
MORTON Thomas

MORTON & BREMNER
Spring balances
1844-1846 61 Elizabeth
1847-1850 63 Elizabeth
1851 15 Platt
1852-1854 212 Pearl
See also
BREMNER Andrew A.
MORTON Thomas

NEW YORK JOURNEYMEN SCALEMAKERS CO.
1851 39 Greene
1854-1855 221 Pearl & 39 Greene
1856-1857 221 Pearl & 41 Wooster
1863-1865 manufactury 73 Laurens, formerly 39 Greene
1868 155 Water & 73 Laurens
1871 195 Water & 211 Greene
1876-1877 195 Water & 211 Greene
See also
BRYDEN John
BRYDEN & ROBIDOUX
JOURNEYMEN SCALEMAKERS CO.
ROBIDOUX

NEW YORK JOURNEYMAN'S SOCIETY
1850 43 Greene

NEW YORK SCALE MAKERS CO.
1852-1854 187 Water
See also
SHEPPARD George G.

NICHOLS A. S. Co. (check 1860s)

NICHOLS Samuel, Jr.

1840-1842	252 Water

Took over from Dow and Whitty
See also NICHOLS, William

NICHOLS William
Scalebeams

1837	252 Water

See also NICHOLS, Samuel, Jr.

PINKNEY William T., Jr.

1853-1854	166 Pearl

POTTER Samuel S.

1849	209 Water
1851	107 John

RICHTMANN C. (check)
1884

ROBIDOUX Joseph
Scalemaker

1849-1850	43 Greene
1851-1854	39 Greene
1855	39 Greene & 221 Pearl
1857	221 Pearl, 41 Wooster, & 2 Platt
1858-1864	73 Laurens & 173 Pearl
1865-1868	73 Laurens & 155 Water
1869-1873	73 Laurens & 195 Water
1875-1876	195 Water & 211 Greene

See also
BRYDEN John
BRYDEN & ROBIDOUX
NEW YORK JOURNEYMEN SCALEMAKERS CO.
ROBIDOUX J. & Son

ROBIDOUX J. & Son
Scales

1876-1877	195 Water & 211 Greene

see also
ROBIDOUX John
NEW YORK JOURNEYMEN SCALEMAKERS CO.

ROBIDOUX William H.
Scales

1876	195 Water & 211 Greene

See also
NEW YORK JOURNEYMEN SCALEMAKERS CO.
ROBIDOUX Joseph
ROBIDOUX Joseph & Son
ROBIDOUX William H.

SAMPSON SCALE CO. (check)

1869	240 Broadway

SCHEURER Frederick

1851	58 Chatham
1853	88 Chatham
1854	30 N. William
1856-1857	10 N. William

SHEPPARD George G.
Agent for New York Scale Makers Co.

1851-1854	187 Water

See also NEW YORK SCALE MAKERS CO.

SMITH Samuel (check after 1838 and before 1827)
Patent scale maker

1827-1829	83 Washington
1831-1834	73 Washington
1836	256 Grand
1837	9 Eldridge

See also
COLE John
COLE & SMITH

SMITH Thomas
Platform scales

1836	79 Washington
1837	101 Washington
1838-1840	20 Rector
1846	50 West

SPARK, Alexander
See also
ASTEN, SPARK, & CO.
ASTEN T. B.

SPIESS Frederick

1851-1853	162 William
1854	176 William
1856-1857	1 Chambers

STEVES Richard W.

1853-1857	152 Front

TAYLOR & PHILLIPS

1844	3 Roosevelt

THOMPSON B. A.

1846	152 Front

THORNE J. W.
(Fairbanks platform scales)

1844	118 Broad

TOWNSEND J. & C. (check)

1845	90 Broad
1885	

UNDERWOOD
See also
KISSAM James A.
KISSAM & UNDERWOOD

VAN ZELM Henry (check 1888)

VOLLAND Gottfried (check 1888)
Gottfried Volland and Henry Van Zelm were employees of Becker & Sons.
See also VAN ZELM Henry

WADE Ezekiel jr

1841-1857	17 Peck Slip

WALSH Theodore
Scales

1839-1840	114 Front

Agent for Dales' patent platform scales

WHITLOCK EXPOSITION CO. (check)

1869	35 Park Place

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

Steven D. Beare
7 E. Brookland Ave
Wilmington, DE 19805

August 18, 1998

Dear Steven:

Your general request to ISAAC members for additions to your New York City scalemaker list deserves a prompt repy from me.

George Mallis and I are about to publish a compendium on American coin scales and American counterfeit detecting mechanisms so we have done much work in that segment of scalemakers.

The first problem you have is that scale dealers are not necessarily scalemakers. It is difficult to determine from some entries which are which.

The first name on your list is John Allender who is in our segment. He was not from New York City, but from New Haven, Connecticut.

Additions to your list for the 19th century are:

Charles A. Seymour, 442 W. 46th St. (circa 1875)
A. Cyrani, a patentee
Berrian Mfg. Co. (circa 1883)

Please send me your existing draft of Philadelphia scalemakers as we probably are able to help you somewhat.

Sincerely,

EPN

Eric P. Newman

cc: George Mallis

8/23/98

Dear Eric.

Thanks for the additional names & pointing out that Allender is not a NYC maker. I added his & a few other CCD makers from the EQM index, but did not yet check the actual EQM articles, so this was just a note to myself to check further before looking in directories. Happy that you and George Malis are publishing your work, will that be in EQM or privately?

Have tried to include only scalemakers and not dealers or distributors, with the notable exception of Fairbanks & various partners, which will be duly noted if included. Will draw upon Ruth Willard, Diana Hitchins, Allan Yale & others' suggestions on whether to include here, and if I included other non-NYC makers would appreciate hearing. Will be happy to send you a working copy of the Phila list when it is more complete. Regards, Steve

Would appreciate a draft of your work in return

Steven D. Beare
7 E. Brookland Ave.
Wilmington, DE 19805
302-998-7651

November 3, 1998

Eric P. Newman
6450 Cecil Ave.
St. Louis, MO 63105

Dear Eric:

Thank you for calling the other evening. I am enclosing photos of two of the scales we talked about. The first is a cased coin scale by Troemner, purchased at auction when PSFS bank went out of business a few years ago. The mahogany case measures 19 1/2" wide by 14 1/4" high by 9 1/2" deep, and has a sliding door in front to keep out the dust. The six coin weights are countersunk into the base, and the values are $1, 2 1/2, 3, 5, 10, and 20. The scale is in excellent condition, evidently having been on display for some time in the main bank at 11th and Walnut, Philadelphia. Underneath the case is written in pencil the year 1897, which looks about right for the date of manufacture. A friend at Hagley located a photograph of this scale in the PSFS collection of ephemera. The coin "pan" is made by soldering or brazing a thin sheet of steel onto a cast and machined brass base, and thus avoided denting the soft brass. The levelling screws are no longer present. Laird Park told me he has not seen another example of this scale.

As I mentioned, I recently purchased a similar cased coin scale example by H. Kohlbush, 59 Nassau St, NY. Only two of the six weights remain ($2 1/2 & 5), and the hangers are gone. The brass was heavily oxidized, and it required polishing, although the beam still retains its nice enginework.

The second example is a bank scale by Howard & Davis, Boston, purchased at a Brookfield , Mass auction two years ago. It is 31" high by 37" overall width, and the pans are 10 1/2" in diameter. The beam is stamped twice on each side "Howard & Davis Boston". The original weights are present, and are also stamped "Howard & Davis Boston", and range from 2oz, 4oz, 8 oz, 1lb, 2lb, to 4lb. The 1oz weight is a replacement, and the 1/4 and 1/2 oz weights are missing. The weights are adjustable.

You are welcome to use these photos, although I must apologize for the less than professional quality. I will try to take better photos in the near future.

I am also enclosing a photocopy of Benjamin Dearborn's advertisement of 1804 (original at Hagley) describing his Patent balance, and which also mentions his gold standard balances for banks. I have not yet obtained permission from Hagley to publish this, and if there is interest I will see if Hagley will allow ISASC to reproduce and sell to its members as a broadside. It is a great piece of Americana.

I am also enclosing the latest draft of the Boston 19th century scalemakers listing through 1860.

Sincerely,

Steve Beare

Supplement to the Boston Gazette.

MONDAY, JULY 2, 1804.

DEARBORN's System for weighing with EASE, DISPATCH, and PRECISION; Purchased for Half the Cost, and used with Half the Labor, of Scales and Weights.

The SUBSCRIBER, Patentee of the PROPORTIONAL BALANCE (which has been usually called the Patent Balance) informs the Public, that he has now the Sole direction of manufacturing and vending that valuable instrument; and adds his assurances, that no efforts shall be withheld for preserving the reputation which it has already gained.

During the time this Balance has been known to the public, the three following questions have frequently been put to the Proprietor.

1st. Is not your Balance liable to be often out of repair?

2d. In what consists the difference between this and the common Steelyard?

3d. Will not the effects of heat and cold tend to destroy the accuracy of the Instrument, by expanding and contracting the Beam?

The following Facts, Demonstrations and experiment are replies to those questions.

Facts in reply to question 1st.

The Balance which was originally made for experiment, was for domestic use, and is calculated for weighing 234 lb. The Subscriber has the written testimony of a Gentleman of undoubted veracity, that he shewed him the Instrument in the year 1783.

From the time of its being finished it has been much and roughly used, notwithstanding which, it presents, as yet, not the smallest indication of the want of any repair.

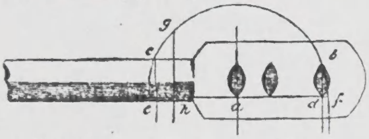
The first Beam for weighing large draughts was made since the Patent was obtained; it has been in use nearly four years, and has been exercised in weighing at least sixteen thousand hogsheads.

It has not yet required even a second painting or any other repair, and performs exactly as at first, without exhibiting the least testimony of defect.

If further proofs of its durability be sought, time only can furnish them.

Demonstrations in reply to question 2d.

The Common Steelyard.



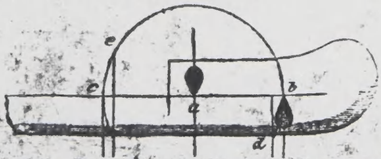
The Principles of the Common Steelyard explained.

The ends of three pivots appear in the centre of the breadth of the Beam: *a* is the centre of motion, upon which the beam turns in the arch of a circle: *b* is the point where the article to be weighed is suspended, and *c* is the point where the poize is suspended, both being *above* the centre of motion. While the beam remains level, the horizontal distances of these points of suspension from the centre of motion, are *a d*, and *a e*. Depress the larger end of the beam until the point *b* falls to *f*, and the point *c* will rise to *g*. It is evident, that on the falling side the horizontal distance *a d* is increased to *a f*, and on the rising side, the horizontal distance *g e* is reduced to *a h*.

Thus by an encreasing power on the falling side, the reducing power on the rising side is overcome, and the equilibrium is destroyed. Hence the reason why the Common Steelyard, and every beam constructed on those principles, must ever be liable to error and to fraud.

With the radical error above exemplified, two other errors are united in the Common Steelyard; all of which are carefully avoided in the construction of the following instrument.

The Proportional Balance.



The principles of the Proportional Balance explained.

The ends of two pivots appear near the shoulder in the beam, *a* is the centre of motion upon which the beam turns in the arch of a circle: *b* is the point where the article to be weighed is suspended, and *c* is the point where the poize is suspended, both being *on a line* with the centre of motion. While the beam remains level, the horizontal distances of these points of suspension from the centre of motion, are *a b* and *a c*. Depress the larger end of the Beam, until the point *b* falls to *d* and the poize *c* will rise to *e*. It is evident that the horizontal distances are both reduced, and that this reduction of distances is always equal or proportional, on both sides of the centre of motion. Thus the beam preserves its vibrations like a Scale Beam, and hence the reason why NO ART in management, can render it a fradulent instrument.

Demonstration and Experiment in reply to question 3d.

The power of expansion or contraction influences a bar of metal in all its parts equally, provided the whole be of one kind, and be equally subjected to the effects of heat or cold. If the given distance between the pivots of a beam be one, and the length of its shaft be twenty, then the former will expand or contract in the proportion of one, to twenty of the other, whereby the comparative distances and the equilibrium are preserved. Wherefore if a beam could by the Winter's frost, be reduced to one half of its length in Summer, the proportion of the parts and the power of the weights suspended thereon, must remain unchangeably the same.

But as some minds receive fuller conviction from experiment than from mathematical demonstration, they may be less satisfied with the foregoing than the following.

On the evening of January 21st, 1804, I took a small balance in my room, and suspended sixteen pounds on the hook, which I balanced by the Poize at the proper notch; the thermometer, which was suspended just by it, standing at 38 degrees, or 6 degrees above the freezing point. I then removed both into the open air, where they were suspended together for the term of one hour, when the thermometer fell to 10 degrees, or 22 below the freezing point. The weights were again put on the beam as at first, and an exact equipoize was produced as in the former experiment.

I next placed the beam in a vessel of water, which was made to boil, whereby its temperature was carried to 212, it was then taken out, and the weights were again put on, with as much expedition as possible, when the result, as before, was an exact equipoize.

Thus the instrument was cooled, to sixty six degrees below summer heat, and heated to one hundred and thirty six degrees above it, without producing any variation, and any person who chooses can satisfy himself by similar experiments.

After a strict scrutiny by a Committee of the Honorable GENERAL COURT, an act was passed, authorizing the use of this instrument, in all cases of weighing, throughout this Commonwealth. This act secures to the purchaser the Stamp of a Sworn Sealer on every Beam and its weights.

Since the above period, Certificates of the accuracy and conveniency of this instrument have been so multiplied, that there is not room for their insertion in this advertisement.

In every complaint of a difference in the weight of an article which has been weighed by this balance and by scales and weights, it has been the Subscriber's invariable rule to search for the cause of the difference, when he could come at the scales and weights with which the comparison was made: and in every instance of the kind, which has yet come to his knowledge, the complaint has been found to originate in an error of the Scale Beam, or the iron weights, or in both.

In one instance, five iron weights required no less than ten pounds and half an ounce of lead to adjust them with the Standard; after which, the weight given by the proportional balance, and that given by the scales were exactly correspondent, which before disagreed essentially.

The Subscriber therefore respectfully solicits, that whenever a complaint of the kind arises, it may be traced to its true source, and that its credit may be carried to the account where it belongs.

Description of the use of the Proportional Balance.

The weights for the different sizes of this Balance, consist of the following variety—namely, 1 lb. 2 lb. 4 lb. 8 lb. 16 lb. and 32 lb.—every Beam is calculated for two of the above mentioned weights; one of which is always twice, or four times, or eight times, as heavy as the other.

One of the flat sides of the beam is numbered for the larger, and the other for the smaller of those two weights. Near where the numbers begin, a stamp is impressed on each side of the beam, designating what weight belongs to each side of it.

For example, weights of 16 and 32 pounds are applied to the larger beams, which on one side are stamped P. 16, and on the other P. 32. When those two are not sufficient for weighing the quantity which a beam is designed to draw, more of the larger weights are added; the number of them being shown by the stamp 2 P. 32, or 3 P. 32, &c. Any article not exceeding the numbers on the *small* side of the beam, may be weighed by either of the weights separately. Any article not exceeding the numbers on the *large* side of the beam, may be weighed by the large weight separately; or either of those articles (if not too light) may be weighed by both of the weights together. If both are on, the numbers on both sides, where the weights hang, must be added. If any greater number of weights be used, the numbers where they all hang must be added, and their sum is the weight of the article. It is to be observed, that all numbers for the large weights, are to be taken from the large side of the beam; and for the small weight, from the small side. By these remarks it may be noticed, that in weighing an article of two thousand pounds, *Two Thousand Changes* may be made by different arrangements of the weights, to prove the accuracy of the instrument, or to detect its errors if inaccurate.

Those who wish to weigh ounces with beams of the smaller sizes, may be accommodated with small weights for the purpose, on application at the Factory.

The trouble of lifting the larger weights is reduced by means of a chain, sufficiently long to let the weight rest on the ground, while the hook hangs on the beam. The other weights may be hung upon the lower links of the chain.

By late improvements in the apparatus, the largest hogsheads are now taken up and weighed (without being rolled from their stations) by the labor of two men only, with extreme ease and facility.

To those Gentlemen who have received consignments of Balances, and have promoted the sales by their attention, and the exertions of the Subscriber by their punctuality, he sincerely tenders his thanks, and solicits a continuance of their orders, which will ever claim his prompt attention.

BOSTON, JULY, 1804.

BENJAMIN DEARBORN.

A List of WEIGHTS

which accompany Beams of different sizes, with the price of each Weight annexed.

AMERICAN, or ENGLISH *Weights.*	$	cts.	FRENCH or DUTCH *Weights.* $	cts.
A Brass Weight of 4 Ounces		40		
ditto 8 Ounces		60		
ditto cased do. 1 lb.		75		
ditto 2 lb.	1	—	1	10
ditto 4 lb.	1	25	1	40
ditto 8 lb.	1	75	2	—
ditto 16 lb.	3	—	3	25
ditto with Chain, 16 lb.	3	75	4	—
ditto 32 lb.	5	50	6	—
ditto with Chain, 32 lb.	6	75	7	25
ditto Gross wt. for 8 lb.	—	75		
ditto do. for 16 lb.	1	—		
ditto do. for 32 lb.	1	25		

A List of BEAMS

of different sizes, and the Weights accompanying them, with their prices annexed.

	$	cts.	$	cts.
BEAM for 100 lb.	3	—	6	—
Weights 4 lb. and 8 lb.	3	—		
ditto with a weight of 4 oz.			6	40
ditto with a gross for 8			7	15
BEAM for 150 lb.	3	50	6	50
Weights 4 lb. and 8 lb.	3	—		
ditto with a weight of 4 oz.			6	90
ditto with a gross for 8			7	65
BEAM for 200 lb. *a* 2 cents	4	—	8	25
Weights 4 lb. and 16 lb.	4	25		
ditto with a weight of 4 oz.			8	65
ditto with a gross for 16			9	65
BEAM for 300 lb. *a* 2 cents	6	—	10	25
Weights 4 lb. and 16 lb.	4	25		
ditto with a weight of 4 oz.			10	65
ditto with a gross for 15			11	65
APPARATUS for the above, SET *No.* 1 or 2.				
BEAM for 400 lb. *a* 2 cents	8	—	12	25
Weights 4 lb. and 16 lb.	4	25		
ditto with weight of 4 oz.			12	65
ditto with a gross for 16			13	65
BEAM for 500 lb. *a* 2 cents	10	—	14	75
Weights 8 lb. and 16 lb.	4	75		
ditto with a weight of 8 oz.			15	35
ditto with grosses for 8 and 16			17	10
BEAM for 600 lb. at 2 cents	12	—	16	75
Weights 8 lb. and 16 lb.	4	75		
ditto with grosses for 8 and 16			18	50
APPARATUS for the above, SETS *No.* 3 *to* 8.				
BEAM for 700 lb. *a* 2 cents	14	—	18	75
Weights 8 lb. and 16 lb.	4	75		
ditto with grosses for 8 & 16			20	50
BEAM for 800 lb. *a* 2 cents	16	—	23	25
Weights 8 lb. and 32 lb.	7	25		
ditto with Chain-Weight 32 lb.			24	50
ditto with 8 lb. and 2 of 16 lb.			23	75
ditto do. with Chain-Weight of 16 lb.			24	50
ditto do. with grosses for 8 & 16			26	25
BEAM for 900 lb. *a* 2 cents	18	—	25	25
Weights 8 lb. and 32 lb.	7	25		
ditto with Chain-Weight 32 lb.			26	50
ditto with grosses for 8 and 32			28	50
APPARATUS for the above, SETS *No.* 9 *to* 14				
BEAM for 1000 lb. *a* 2 cents	20	—	28	50
Weights 16 lb. and 32 lb.	8	50		
ditto with Chain-Weight 32 lb.			29	75
ditto with grosses for 16 & 32			32	—
BEAM for 1100 lb. *a* 2 cents	22	—	30	50
Weights 16 lb. and 32 lb.	8	50		
ditto with Chain Weight 32 lb.			31	75
ditto with grosses for 16 & 32			34	—
BEAM for 1200 lb. *a* 2 cents	24	—	32	50
Weights 16 lb. and 32 lb.	8	50		
ditto with Chain-Weight 32 lb.			33	75
ditto with grosses for 16 & 32			36	—
BEAM for 1300 lb. *a* 2 cents	26	—	34	50
Weights 16 lb. and 32 lb.	8	50		
ditto with Chain-Weight 32 lb.			35	75
ditto with grosses for 16 & 32			38	—
BEAM for 1400 lb. *a* 2 cents	28	—	36	50
Weights 16 lb. and 32 lb.	8	50		
ditto with Chain-Weight 32 lb.			37	75
ditto with grosses for 16 & 32			40	—
APPARATUS for the above, SETS *No.* 15 *to* 22.				
BEAM for 1,500 lb. *a* 2 cents	30	—	44	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			45	25
ditto with gross for 16 & 2 for 32			48	75
BEAM for 1600 lb. *a* 2 cents	32	—	46	—
Weights 16 lb. and 2 of 32 lb	14	—		
ditto with Chain-Weight 32 lb.			47	25
ditto with gross for 16 and 2 for 32			50	75
BEAM for 1700 lb. *a* 2 cents	34	—	48	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			49	25
ditto with gross for 16 and 2 for 32			52	75
BEAM for 1800 lb. *a* 2 cents	36	—	50	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			51	25
ditto with gross for 16 and 2 for 32			54	75
BEAM for 1900 lb. *a* 2 cents	38	—	52	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			53	25
ditto with gross for 16 & 2 for 32			55	75
BEAM for 2000 lb. *a* 2 cents	40	—	54	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			55	25
ditto with gross for 16 & 2 for 32			58	75
APPARATUS for the above, SETS *No.* 23 *to* 34.				
BEAM for 1 ton, or 2240 lb. *a* 2 cts.	44	80	58	80
Weights 16 lb. & 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			60	05
ditto with gross for 16 & 2 for 32			63	55
BEAM for 2500 lb. *a* 2 cents	50	—	69	50
Weight 16 lb. and 3 of 32 lb.	19	50		
ditto with Chain-Weight 32 lb.			70	75
ditto with gross for 16 & 3 for 32			75	50
BEAM for 3000 lb. *a* 2 cents	60	—	79	50
Weights 16 lb. and 3 of 32 lb.	19	50		
ditto with Chain-Weight 32 lb.			80	75
ditto with gross for 16 & 3 for 32			85	50
APPARATUS for the above, SETS *No.* 35 *to* 50.				
BEAM and Weights for 4500 lbs. to weigh Loaded Carriages,			100	—

The price of the Apparatus for the foregoing Beam, will be proportioned according to the number of articles and their dimensions.

BEAMS with weights for weighing 10000 lb. or a greater quantity, will be furnished if applied for.

A List of ARTICLES

which constitute the Apparatus for Beams of different sizes, with the price of each article annexed.

No.		$	cts.
	For small Beams.		
No. 1.	Tin Sc[illegible]		[illegible]
2.	Tin Bal[illegible] Case, with Shot		50
3.	A Stand, with Guards	1	[illegible]
	For Beams from 400 *lb. to* 600 *lb.*		
No. 4.	Folding Scale and Skid, 1st size	6	—
5.	Scale, Chains, Branch, & Skid 1st size	7	25
6.	Brass Balance Case with Shot	1	—
7.	Screw and Loop, 1st size,	1	50
8.	Frame with Guards, 1st size,	[illegible]	50
9	Box for Weights		50
	For Beams from 600 *lb. to* 900 *lb.*		
No. 10.	Folding Scale and Skid, 2d size	7	—
11.	Scale, Chains, Branch & Skid, 2d size	8	50
12.	Brass Balance Case with Shot,	1	25
13.	Screw and Loop, 2d size,	2	50
14.	Frame with Guards, 2d size	6	—
15.	Box for Weights		40
	For Beams from 900 *lb. to* 1400 *lb.*		
No. 16.	Folding Scale and Skid, 3d size	8	—
17.	Scale, Chains, Branch & Skid, 3d size,	9	75
18.	Screw and Loop, 3d size	3	—
19.	Frame with Guards, 3d size	6	50
20.	Single Iron Lever with Chain	7	75
21.	Box for Weights		50
	For Beams from 1400 *lb. to* 2000 *lb.*		
No. 22.	Folding Scale and Skid, 4th size	9	—
23.	Scale, Chains, Branch & Skid, 4th size,	11	—
24.	Brass Balance Case with Shot,	1	75
25.	Screw and Loop, 4th size	4	—
26.	Frame with Guards, 4th size	7	—
27.	Box for Weights, Branch and Chains		60
	For Beams from 2000 *lb. to* 3000 *lb.*		
No. 28.	Folding Scale and Skid, 5th size	10	—
29.	Scale, Chains, Branch & Skid, 5th size,	12	50
30.	Brass Balance Case with Shot,	1	75
31.	Screw and Loop, 5th size,	4	25
32.	Frame with Guards, 5th size	7	75
33.	Double Iron Lever with Chains	12	—
34.	A pair of Grapnels,	10	—
35.	A pair of Canhooks with Chains	5	50
36.	Balance Case with Shot for Canhooks		75
37.	Box for Weights, Branch, and Chain		75
	For Beams to weigh Loaded Carriages.		
No. 38.	A Scale to hold the Carriage with its load		
39.	A small Scale with Chains for the weights		
40.	A Balance Case with Shot		

As the above may vary in size, the prices are not carried off.

N. B. BALANCED PLATFORMS are also furnished for driving Loaded Carriages on, and weighing them accurately, without suspending them from above.

Sets of APPARATUS

adapted to Beams of differant sizes, and so arranged as to suit the convenience of those who may choose a greater or less number of articles in the Set.

SET No.		Articles	$	cts.
SET No. 1.	Articles	1, and 2.	2	—
SET .. 2.	do.	1, 2, and 3	3	—
SET .. 3.	do.	4, 6, and 9	7	30
SET .. 4.	do.	4, 6, 7, and 9	8	80
SET .. 5.	do.	4, 6, 7, 8, and 9	14	30
SET .. 6.	do.	5, 6, and 9	8	55
SET .. 7.	do.	5, 6, 7, and 9,	10	05
SET .. 8.	do.	5, 6, 7, 8, and 9	15	55
SET .. 9.	do.	10, 12, and 15	8	65
SET .. 10.	do.	10, 12, 13, and 15	11	15
SET .. 11.	do.	10, 12, 13, 14, and 15	17	15
SET .. 12.	do.	11, 12, and 15	10	15
SET .. 13.	do.	11, 12, 13, and 15	12	65
SET .. 14.	do.	11, 12, 13, 14, and 15	18	65
SET .. 15.	do.	12, 15, and 16	9	65
SET .. 16.	do.	12, 15, 16, and 18	12	65
SET .. 17.	do.	12, 15, 16, 18, and 19	15	15
SET .. 18.	do.	12, 15, 16, 18, 19, and 20	26	90
SET .. 19.	do.	12, 17, and 21	11	50
SET .. 20.	do.	12, 17, 18, and 21	14	50
SET .. 21.	do.	12, 17, 18, 19, and 21	21	—
SET .. 22.	do.	12, 17, 18, 19, 20, and 21	[illegible]	
SET .. 23.	do.	21, 22, and 24	11	25
SET .. 24.	do.	21, 22, 24, and 25	15	25
SET .. 25.	do.	21, 22, 24, 25, and 26	[illegible]	15
SET .. 26.	do.	20, 21, 22, 24, and 26	26	—
SET .. 27.	do.	20, 21, 22, 24, 26, 33 & 36	[illegible]	[illegible]
SET .. 28.	do.	12, 20, 21, 22, 24, 26, & 34	37	25
SET .. 29.	do.	23, 24, and 27	13	35
SET .. 30.	do.	23, 24, 25, and 27	17	35
SET .. 31.	do.	23, 24, 25, 26, and 27	24	37
SET .. 32.	do.	20, 23, 24, 26, and 27	28	10
SET .. 33.	do.	20,23,24,26,27,35, & 36	34	35
SET .. 34.	do.	12,20,23,24,26,27, & 34	39	35
SET .. 35.	do.	21, 28, and 30	12	25
SET .. 36.	do.	21, 28, 30, and 31	16	50
SET .. 37.	do.	21, 28, 30, 31, and 32	24	25
SET .. 38.	do.	20, 21, 28, 30, and 32	27	75
SET .. 39.	do.	20,21,28,30,32,35, & 36	34	—
SET .. 40.	do.	12,20,21,28,30,32, & 34	39	—
SET .. 41.	do.	21,28,30,32,33,35, & 35	38	26
SET .. 42.	do.	12,21,28,30,32,33, & 34	43	25
SET .. 43.	do.	29, 30, and 37	15	—
SET .. 44.	do.	29, 30, 31, and 37.	19	25
SET .. 45.	do.	29, 30, 31, 32, and 37	27	—
SET .. 46.	do.	20, 29, 30, 32, and 37	30	50
SET .. 47.	do.	20,29,30,32,35,36, & 37	36	75
SET .. 48.	do.	12,20,29,30,32,34, & 37	41	75
SET .. 49.	do.	29,30,32,33,35,36, & 37	41	—
SET .. 50.	do.	12,29,30,32,33,34, & 37	46	—

The above Sets are selected from the List of Articles.

From Ten to Twenty per Cent is added to the foregoing prices for Charges of Exportation, on all Balances shipped at the Expense and Risque of the Patentee.

Gold Standard Balances for Banks, and Hydrostatic Balances

for detecting *Counterfeit Coins*, both constructed upon a different application of principles, from any thing of the kind heretofore known, are furnished by B. DEARBORN near the Western end of the Theatre, Boston.

em, with their prices annexed.

	$	cts.	$	cts.
BEAM for 100 lb.	3	—	6	—
Weights 4 lb. and 8 lb.	3	—		
ditto with a weight of 4 oz.			6	40
ditto with a gross for 8			7	15
BEAM for 150 lb.	3	50	6	50
Weights 4 lb. and 8 lb.	3	—		
ditto with a weight of 4 oz.			6	90
ditto with a gross for 8			7	65
BEAM for 200 lb. a 2 cents	4	—	[illegible]	25
Weights 4 lb. and 16 lb.	4	25		
ditto with a weight of 4 oz.			[illegible]	65
ditto with a gross for 16			[illegible]	65
BEAM for 300 lb. a 2 cents	6	—	10	25
Weights 4 lb. and 16 lb.	4	25		
ditto with a weight of 4 oz.			10	65
ditto with a gross for 15			11	65

APPARATUS for the above, SET *No.* 1 *or* 2.

	$	cts.	$	cts.
BEAM for 400 lb. a 2 cents	8	—	12	25
Weights 4 lb. and 16 lb.	4	25		
ditto with weight of 4 oz.			12	65
ditto with a gross for 16			13	65
BEAM for 500 lb. a 2 cents	10	—	14	[illegible]
Weights 8 lb. and 16 lb.	4	75		
ditto with a weight of 8 oz.			[illegible]	[illegible]
ditto with grosses for 8 and 16			17	10
BEAM for 600 lb. at 2 cents	12	—	16	[illegible]
Weights 8 lb. and 16 lb.	4	75		
ditto with grosses for 8 and 16			[illegible]	[illegible]

APPARATUS for the above, SETS *No.* 3 *to* 8.

	$	cts.	$	cts.
BEAM for 700 lb. a 2 cents	14	—	18	[illegible]
Weights 8 lb. and 16 lb.	4	75		
ditto with grosses for 8 & 16			20	50
BEAM for 800 lb. a 2 cents	16	—	23	[illegible]
Weights 8 lb. and 32 lb.	7	25		
ditto with Chain-Weight 32 lb.			24	80
ditto with 8 lb. and 2 of 16 lb.			23	75
ditto do. with Chain-Weight of 16 lb.			24	50
ditto do. with grosses for 8 & 16			26	25
BEAM for 900 lb. a 2 cents.	18	—	25	25
Weights 8 lb. and 32 lb.	7	25		
ditto with Chain-Weight 32 lb.			[illegible]	[illegible]
ditto with grosses for 8 and 32			28	50

APPARATUS for the above, SETS *No.* 9 *to* 14

	$	cts.	$	cts.
Weights 16 lb. and 2 of 32 lb.	14	—	44	—
ditto with Chain-Weight 32 lb.			45	25
ditto with gross for 16 & 2 for 32			[illegible]	[illegible]
BEAM for 1600 lb. a 2 cents	32	—	46	—
Weights 16 lb. and 2 of 32 lb	14	—		
ditto with Chain-Weight 32 lb.			47	25
ditto with gross for 16 and 2 for 32			50	75
BEAM for 1700 lb. a 2 cents	34	—	[illegible]	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			49	25
ditto with gross for 16 and 2 for 32			52	75
BEAM for 1800 lb. a 2 cents	36	—	50	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			51	[illegible]
ditto with gross for 16 and 2 for 32			[illegible]	75
BEAM for 1900 lb. a 2 cents	[illegible]	—	52	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			53	25
ditto with gross for 16 & 2 for 32			55	75
BEAM for 2000 lb. a 2 cents	[illegible]	—	54	—
Weights 16 lb. and 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			55	25
ditto with gross for 16 & 2 for 32			[illegible]	75

APPARATUS for the above, SETS *No.* 23 *to* 34.

	$	cts.	$	cts.
BEAM for 1 ton, or 2240 lb. a 2 cts.	44	[illegible]	[illegible]	[illegible]
Weights 16 lb. & 2 of 32 lb.	14	—		
ditto with Chain-Weight 32 lb.			60	[illegible]
ditto with gross for 16 & 2 for 32			63	55
BEAM for 2500 lb. a 2 cents	50	—	69	50
Weight 16 lb. and 3 of 32 lb.	19	50		
ditto with Chain-Weight 32 lb.			70	75
ditto with gross for 16 & 3 for 32			75	50
BEAM for 3000 lb. a 2 cents	60	—	[illegible]	50
Weights 16 lb. and 3 of 32 lb.	19	50		
ditto with Chain-Weight 32 lb.			[illegible]	75
ditto with gross for 16 & 3 for 32			[illegible]	[illegible]

APPARATUS for the above, SETS *No.* 35 *to* 50

	$	cts.
BEAM and Weights for 4500 lbs. to weigh Loaded Carriages,	100	—

The price of the Apparatus for the foregoing Beam, will be proportioned according to the number of articles and their dimensions.

BEAMS with weights for weighing 10000 lb. or a greater quantity, will be furnished if applied for

	$	cts.
[illegible]	6	—
15. Box for Weights		40

For Beams from 900 *lb. to* 1400 *lb.*

	$	cts.
No.16. Folding Scale and Skid, 3d size	[illegible]	—
17. Scale, Chains, Branch & Skid, 3d size,	[illegible]	75
18. Screw and Loop, 3d size	3	—
19. Frame with Guards, 3d size	6	50
20. Single Iron Lever with Chain	7	75
21. Box for Weights		50

For Beams from 1400 *lb. to* 2000 *lb.*

	$	cts.
No.22. Folding Scale and Skid, 4th size	9	—
23. Scale, Chains, Branch & Skid, 4th size,	11	—
24. Brass Balance Case with Shot,	1	75
25. Screw and Loop, 4th size	[illegible]	—
26. Frame with Guards, 4th size	7	—
27. Box for Weights, Branch and Chains		60

For Beams from 2000 *lb. to* 3000 *lb.*

	$	cts.
No.28. Folding Scale and Skid, 5th size	10	—
29. Scale, Chains, Branch & Skid, 5th size,	12	50
30. Brass Balance Case with Shot,	1	75
31. Screw and Loop, 5th size,	4	25
32. Frame with Guards, 5th size	7	75
33. Double Iron Lever with Chains	12	—
34. A pair of Grapnels,	10	—
35. A pair of Canhooks with Chains	[illegible]	50
36. Balance Case with Shot for Canhooks		75
37. Box for Weights, Branch, and Chain		75

For Beams to weigh Loaded Carriages.

No.38. A Scale to hold the Carriage with its load
39. A small Scale with Chains for the weights
40. A Balance Case with Shot

As the above may vary in size, the prices are not carried off.

N. B. BALANCED PLATFORMS are also furnished for driving Loaded Carriages on, and weighing them accurately, without suspending them from above.

SET	.. 15.	do.	12, 15, and 16	9	65
SET	.. 16.	do.	12, 15, 16, and 17	12	65
SET	.. 17.	do.	12, 15, 16, 18, and 19	15	15
SET	.. 18.	do.	12, 15, 16, 18, 19, and 20	26	90
SET	.. 19.	do.	12, 17, and 21	11	50
SET	.. 20.	do.	12, 17, 18, and 21	14	50
SET	.. 21.	do.	12, 17, 18, 19, and 21	21	—
SET	.. 22.	do.	12, 17, 18, 19, 20, and 21	[illegible]	
SET	.. 23.	do.	21, 22, and 24	11	25
SET	.. 24.	do.	21, 22, 24, and 25	15	25
SET	.. 25.	do.	21, 22, 24, 25, and 26	[illegible]	[illegible]
SET	.. 26.	do.	20, 21, 22, 24, and 26	26	—
SET	.. 27.	do.	20, 21, 22, 24, 26, 33 [illegible]	[illegible]	[illegible]
SET	.. 28.	do.	12, 20, 21, 22, 24, 26, & 34	37	25
SET	.. 29.	do.	23, 24, and 27	13	35
SET	.. 30.	do.	23, 24, 25, and 27	17	35
SET	.. 31.	do.	23, 24, 25, 26, and 27	24	37
SET	.. 32.	do.	20, 23, 24, 26, and 27	28	10
SET	.. 33.	do.	20,23,24,26,27,33, & 36	34	35
SET	.. 34.	do.	12,20,23,24,26,27, & 34	39	35
SET	.. 35.	do.	21, 28, and 30	12	25
SET	.. 36.	do.	21, 28, 30, and 31	16	50
SET	.. 37.	do.	21, 28, 30, 31, and 32	24	25
SET	.. 38.	do.	20, 21, 28, 30, and 32	27	75
SET	.. 39.	do.	20,21,28,30,32,33, & 36	34	—
SET	.. 40.	do.	12,20,21,28,30,32, & 34	39	—
SET	.. 41.	do.	21,28,30,32,33,35, & 35	38	[illegible]
SET	.. 42.	do.	12,21,28,30,32,33, & 34	45	25
SET	.. 43.	do.	29, 30, and 37	15	—
SET	.. 44.	do.	29, 30, 31, and 37.	19	25
SET	.. 45.	do.	29, 30, 31, 32, and 37	27	—
SET	.. 46.	do.	20, 29, 30, 32, and 37	30	50
SET	.. 47.	do.	20,29,30,32,35,36, & 37	36	75
SET	.. 48.	do.	12,20,29,30,32,34, & 37	41	75
SET	.. 49.	do.	29,30,32,33,35,36, & 37	41	—
SET	.. 50.	do.	12,29,30,32,33,34, & 37	40	—

The above Sets are selected from the List of Articles.

From Ten to Twenty per Cent is added to the foregoing prices for Charges of Exportation, on all Balances shipped at the Expense and Risque of the Patentee.

Gold Standard Balances for Banks, and Hydrostatic Balances

for detecting *Counterfeit Coins*, both constructed upon a different application of principles, from any thing of the kind heretofore known, are furnished by B. Dearborn near the Western end of the Theatre, Boston.

Brass stamped twice
Howard & Davis Boston

Steven D Beare

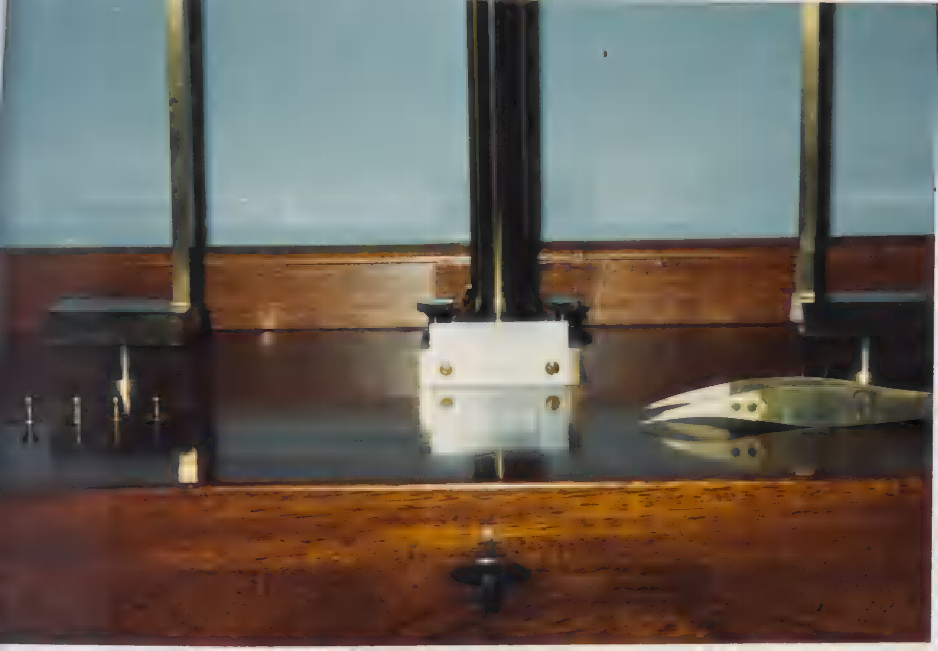
Troemner 19½" wide

14¼" high

9½" deep

Circa
1897

Six coin weights
$1, 2½, 3, 5, 10, 20



Specimen

close up of scale button

Howard & Davis, Boston

31" high   Pans 10½" dia
37" wide

Original wts were
1/4 oz, 1/2, 1, 2, 4, 8   pounds 1, 2, 4
lower 2 wts missing, 1 oz is replacement.
Wts are stamped Howard & Davis, Boston,

Howard + Davis, Boston stamped on beam twice

31" high   Pans 10½"
37" wide

Wts also stamped Howard + Davis, Boston

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

Steven D. Beare
7 E. Brookland Ave
Wilmington, DE 19805

November 11, 1998

Dear Steve:

Your November 3, 1998 letter and enclosures are just what I needed to clear up some of the coin scale information I was working on. Thank you so much.

As to the Boston Gazette Supplememnt I had already been sent the material by Betty Wright and will publish the bottom advertisement relating to Gold Balances for Banks. The rest is on general scale history matters.

The gold scales you have are wonderful and I will mention their characteristics in the scale book. I will use the pictures if the black and white images come out clearly enough. I will also mention the coin weights used for the two scales you have with such weights.

Thanks for being so cooperative.

Sincerely,

Eric P. Newman

ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

April 12, 2001

Mr. Steven V. Beare
P.O. Box 403
Milton, DE 18968

Dear Steve:

Were you ever able to locate a whole roll or partial roll of 40 inch wide .0075 inch thick Mylar? Any other large width would be OK.

I would be very grateful if you could find some.

Thanks,

Eric P. Newman

Mr. Steven V. Beare
P.O. Box 403
Milton, DE 18968

April 12, 2001

Dear Steve:

Were you ever able to locate a whole roll or partial roll of 40 inch wide .0075 inch thick Mylar? Any other large width would be OK.

I would be very grateful if you could find some.

Thanks,

Eric P. Newman

Eric, I'll be on Reference duty today
12:30 - 5

516-7247.

You can call me with changes if needed.